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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,031	07/14/2003	James D. Pylant	067810/0303880 PI-018	1179

7590 01/14/2005

PILLSBURY WINTHROP LLP  
2550 Hanover Street  
Palo Alto, CA 94304

EXAMINER
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HUYNH, LOUIS K

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/621,031	<b>Applicant(s)</b> PYLANT ET AL.	
	<b>Examiner</b> Louis K. Huynh	<b>Art Unit</b> 3721	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/1/03 &amp; 11/15/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 1-14 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/10/2004.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawada (US 6,119,865) in view of Takeuchi et al. (5,238,876).

Kawada discloses a method of storing a plurality of wafer assembly including the steps of: placing a wafer (4) on an adhesive sheet (3), adhering the adhesive sheet (3) to a frame (2) to form a wafer assembly (1) (col. 2, lines 17-30), sequentially placing and aligning each of a plurality of wafer assemblies (1) into a container (15) along orientation artifacts (16) disposed inside of the container (15) in order to form a stack of wafer assemblies, and covering the container with a cover (17). The method of Kawada meets all of applicant's claimed subject matter but lacks the specific teaching of the wafer frame having at least one alignment artifact disposed thereon for aligning with the orientation artifacts disposed inside the container in order to prevent substantial rotational movement of the wafer assembly within the container.

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However, it is known in the art that a wafer frame is not always in a perfect circular shape as disclosed in the exemplary embodiment of Kawada. Takeuchi discloses a wafer assembly including a ring frame (11), a wafer (1), a tape (10) for holding the wafer (1) to the frame (11); wherein the ring frame (11) has alignment artifacts (straight edges) along the perimeter for mounting onto a chuck (12) in the dicing process such that the alignment artifacts prevent the wafer from rotational movement while the wafer being divided.

Therefore, it would have been obvious to an ordinary skilled person in the art, at the time the invention was made, to have modified the method of Kawada by having replacing the circular wafer frame with one having alignment artifacts, such as one disclosed by Takeuchi, since wafer frame with such alignment artifacts are known for providing alignment in wafer and IC chips manufacturing processes.

Note that the alignment artifacts (straight edges) of the wafer frame of Takeuchi would align with the orientation artifacts (16) of the container (15) of Kawada would prevent substantial rotational movement of the wafer assembly within the container.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure has been cited on form PTO-892 along with the applied prior art.

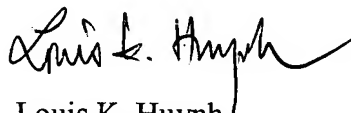
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis K. Huynh whose telephone number is (571) 272-4462.

The examiner can normally be reached on M-F from 9:30AM to 5:00PM.

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6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Louis K. Huynh  
PRIMARY EXAMINER  
Art Unit 3721

December 23, 2004